IN THE CLAIMS:

Please amend claim 148 as follows.

Please cancel claim 168 without prejudicc

1-127 cancelled

128. (withdrawn) A mcthod, comprising:

depositing two sacrificial layers on a substrate;

forming an array of mirror plates on one of the two sacrificial layers;

forming a hinge, for each mirror plate, on the other sacrificial layer of the two sacrificial layers, wherein the sacrificial layer between the mirror plate and the hinge is from 0.15 to 0.45 micrometers; and

removing at least a portion of one or both of the two sacrificial layers using a spontaneous vapor phase chemical etchant.

129. (withdrawn) The method of claim 128, wherein thc sacrificial layer between the mirror plate and the hinge is from 0.15 to 0.25 micrometers.

130. (withdrawn) The method of claim 128, wherein the sacrificial layer between the mirror plate and the hinge is from 0.25 to 0.35 micrometers.

131. (withdrawn) The method of claim 128, wherein the step of removing the two sacrificial layers using the spontaneous vapor phase etchant further comprises:

removing the sacrificial layer betwcen the substrate and the mirror plates via a gap between adjacent mirror plates.

132 . (withdrawn) The method of claim 131, wherein the gap is 0.45 micrometers or less.

133. (withdrawn) The method of claim 131, wherein the gap is from 0.15 to 0.25 micrometers.

134. (withdrawn) The method of claim 131, wherein the gap is from 0.25 to 0.5 micrometers.

135. (withdrawn) The method of claim 128, wherein the step of forming the array of mirror plates on one of the two sacrificial layers, further comprising:

forming the array of mirror plates such that a center-to-center distance between the adjacent mirror plates is from 4.38 to 10.16 micrometers.

136. (withdrawn) The method of claim 28, wherein the step of forming the array of mirror plates on one of the two sacrificial layers, further comprising:

forming the array of mirror plates such that a center-to-center distance between the adjacent mirror plates is from 8.07 to 10.16 micrometers.

137. (withdrawn) The method of claim 128, wherein the step of forming the hinge on the other sacrificial layer for each mirror plate further comprises:

forming the hinge for the mirror plate such that, after removing the sacrificial layers, a) the mirror plate can rotate relative to the substrate along a rotation axis that is parallel to but offset from a diagonal of the mirror plate when viewed from the top of the mirror plate; and b) the mirror plate can rotate to an angle at least 14 degrees relative to the substrate; and

wherein the step of forming the array of mirror plates on the sacrificial layer further comprises:

forming the array of mirror plates on the sacrificial layer such that adjacent mirror plates have a center-to-center distance from 4.38 to 10.16 micrometers.

138. (withdrawn) The method of claim 128, wherein the step of forming the hinge on the sacrificial layer for each mirror plate further comprises:

forming the hinge such that, after removing the two sacrificial layers, the mirror plate can rotate to a rotation angle at least 14 degrees relative to the substrate.

139. (withdrawn) The method of claim 28, wherein the step of removing the sacrificial layers further comprises:

monitoring an endpoint of the sacrificial layer being removed using a residual gas analyzer.

140. (withdrawn) The method of claim 128, wherein one or both of the sacrificial layers are amorphous silicon.

141. (withdrawn) The method of claim 128, wherein the spontaneous vapor phase chemical etchant is an interhalogen.

142. (withdrawn) The method of claim 128, wherein the spontaneous vapor phase chemical etchant is a noble gas halide.

143. (withdrawn) The method of claim 142, wherein the noble gas halide comprises xenon difluoride.

144. (withdrawn) The method of claim 141, wherein the interhalogen comprises bromine trichloride or bromine trifluoride.

145. (withdrawn) The method of claim 128, wherein a diluent is mixed with the spontaneous vapor phase chemical etchant.

146. (withdrawn) The method of claim 145, wherein the diluent is selected from N_2, He, Ar, Kr and Xe.

147. (withdrawn) The method of claim 145, wherein the diluent is selected from N_2 and He.

148. (currently amended) A spatial light modulator, comprising: an array of movable mirror plates, each mirror plate being attached to a hinge that is supported by a hinge structure such that the mirror plate can rotate relative to a substrate, on which the hinge structure is formed; and wherein the hinge and the mirror plate is spaced apart from 0.15 to 0.45 micrometers<u>; wherein each mirror plate has an area; and wherein a ratio of a summation of all areas of the mirror plates to an area of the substrate is 90 percent or more.</u>

149. (previously presented) The spatial light modulator of claim 148, wherein the adjacent mirror plates of the array of mirror plates have a center-to-center distance from 4.38 to 10.16 micrometers.

150. (previously presented) The spatial light modulator of claim 148, wherein the adjacent mirror plates of the array of mirror plates have a gap from 0.15 to 0.25 micrometers when the adjacent mirror plates are parallel to the substrate.

151. (previously presented) The spatial light modulator of claim 148, wherein the adjacent mirror plates have a gap from 0.25 to 0.45 micrometers.

152. (previously presented) The spatial light modulator of claim 148, wherein the adjacent mirror plates of the array of mirror plates have a gap of 0.45 micrometers or less when the adjacent mirror plates are parallel to the substrate.

153. (previously presented) The spatial light modulator of claim 148, wherein the array of mirror plates comprises at least 1280 mirror plates along a length of the mirror plate array.

154. (previously presented) The spatial light modulator of claim 148, wherein the array of mirror plates comprises at least 1400 mirror plates along a length of the mirror plate array.

155. (previously presented) The spatial light modulator of claim 148, wherein the array of mirror plates comprises at least 1600 mirror plates along a length of the mirror plate array.

156. (previously presented) The spatial light modulator of claim 148, wherein the array of mirror plates comprises at least 1920 mirror plates along a length of the mirror plate array.

157. (previously presented) The spatial light modulator of claim 148, wherein the hinge and the mirror plate is spaced apart from 0.15 to 0.25 micrometers.

158. (previously presented) The spatial light modulator of claim 148, wherein the hinge and the mirror plate is spaced apart from 0.25 to 0.35 micrometers.

159. (previously presented) The spatial light modulator of claim 148, wherein the hinge and the mirror plate is spaced apart from 0.35 to 0.45 micrometers.

160. (previously presented) The spatial light modulator of claim 149, wherein the center-to-center distance of adjacent mirror plates is from 6.23 to 9.34 micrometers.

161. (previously presented) The spatial light modulator of claim 149, wherein the center-to-center distance of adjacent mirror plates is from 4.38 to 6.57 micrometers.

162. (previously presented) The spatial light modulator of claim 149, wherein the center-to-center distance of adjacent mirror plates is from 4.38 to 9.34 micrometers.

163. (previously presented) The spatial light modulator of claim 148, wherein the hinge is attached to the mirror plate such that the mirror plate can rotate relative to the substrate along a rotation axis that is parallel to but offset from a diagonal of the mirror plate when viewed from the top of the mirror plate; wherein the mirror plate can rotate to an angle at least 14 degrees relative to the substrate; and wherein the adjacent mirror plates has a center-to-center distance from 4.38 to 10.16 micrometers; and wherein the hinge and the mirror plate is spaced apart from 0.15 to 0.25 micrometers.

164. (previously presented) The spatial light modulator of claim 148, further comprising:

an electrode proximate to each mirror plate for electrostatically deflecting the mirror plate.

165. (previously presented) The spatial light modulator of claim 148, wherein the substrate is glass or quartz that is visible light transmissive.

166. (previously presented) The spatial light modulator of claim 165, wherein the substrate comprises an anti-reflection film on a surface of the substrate.

167. (previously presented) The spatial light modulator of claim 165, wherein the substrate comprises a light absorption frame around an edge of the substrate.

168. cancelled

169. (previously presented) The spatial light modulator of claim 148, wherein each mirror plate rotate relative to the substrate in response to an electrostatic field.

170. (previously presented) The spatial light modulator of claim 148, further comprising:

a first electrode that drives the mirror plate rotate in a first rotation direction relative to the substrate; and

a second electrode that drives the mirror plate rotate in a second rotation direction opposite to the first rotation direction relative to the substrate.

171. (previously presented) The spatial light modulator of claim 170, wherein the first electrode and the second electrode are on the same side relative to the rotation axis of the mirror plate.

172. (previously presented) The spatial light modulator of claim 170, wherein the first electrode and the second electrode are on the opposite sides relative to the rotation axis of the mirror plate.

173. (previously presented) The spatial light modulator of claim 148, wherein the substrate is semiconductor.

174. (previously presented) The spatial light modulator of claim 148, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a first direction to an angle from 15° degrees to 27° degrees relative to the substrate.

175. (previously presented) The spatial light modulator of claim 174, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a second direction to an angle from 2° degrees to 9° degrees relative to the substrate.

176. (previously presented) The spatial light modulator of claim 148, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a first direction to an angle from 17.5° degrees to 22.5° degrees relative to the substrate.

177. (previously presented) The spatial light modulator of claim 176, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a second direction to an angle from 2° degrees to 9° degrees relative to the substrate.

178. (previously presented) The spatial light modulator of claim 148, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a first direction to an angle around 20° degrees relative to the substrate.

179. (previously presented) The spatial light modulator of claim 178, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a second direction to an angle from 2° degrees to 9° degrees relative to the substrate.

180. (previously presented) The spatial light modulator of claim 148, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a first direction to an angle around 30° degrees relative to the substrate.

181. (previously presented) The spatial light modulator of claim 180, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a second direction to an angle from 2° degrees to 9° degrees relative to the substrate.

182. (previously presented) The spatial light modulator of claim 150, wherein a center-to-center distance between adjacent mirror plates is from 4.38 to 10.16 micrometers.

183. (previously presented) The spatial light modulator of claim 149, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a first direction to an angle from 12° degrees to 20° degrees relative to the substrate.

184. (previously presented) The spatial light modulator of claim 183, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a second direction to an angle from 2° degrees to 9° degrees relative to the substrate.

185. (previously presented) The spatial light modulator of claim 182, wherein the mirror plate

is attached to the hinge such that the mirror plate rotates in a first direction to an angle from 12° degrees to 20° degrees relative to the substrate.

186. (previously presented) The spatial light modulator of claim 185, wherein the mirror plate is attached to the hinge such that the mirror plate rotates in a second direction to an angle from 2° degrees to 9° degrees relative to the substrate.

187. (previously presented) A projection system, comprising:

a light source;

a spatial light modulator that further comprises:

an array of mirror devices formed on a substrate for selectively reflecting light incident on the mirror devices, wherein each mirror device comprises:

a mirror plate for reflecting light;

a hinge attached to the mirror plate such that the mirror plate can rotate relative to the substrate, wherein the hinge and the mirror plate are spaced apart from 0.15 to 0.45 micrometers; and

a hinge support on the substrate for holding the hinge on the substrate;

a condensing lens for directing light from the light source onto the spatial light modulator; and

a projecting lens for collecting and directing light reflected from the spatial light modulator onto a display target.